

### **REMARKS**

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in Claim 1 relates to a product comprising a sheet of plastic material, wherein the sheet is transparent at least in part and **on at least part of the exterior surface of the sheet is disposed an overmolded plastic material,**

wherein the sheet comprises a plastic material core, and a skin disposed on at least one surface of the core and set back from the peripheral edges of the core, and the skin comprises at least one plastic film having a scratch-resistant layer disposed thereon.

The present claims are different from the claims currently pending in application Serial No. 09/147,813. This copending application is currently under Appeal. A copy of the claims under appeal is attached herewith. Notably, the claims of the co-pending application do not disclose or suggest a product on which an overmolded plastic material is disposed on at least part of the exterior surface of the sheet. Thus, the obviousness-type double patenting rejection should be withdrawn.

In addition, the present application and Serial No. 09/147,813 as shown by the assignment which is filed herewith.

Applicants respectfully request that the Examiner acknowledge that the references cited in the **International Search Report**, filed in the above-identified application on **December 19, 2000**, have been considered. A first request for consideration was filed with the above-identified application on December 19, 2000. No statement regarding the consideration of the references cited in the International Search Report was provided in this case.

The MPEP states as follows:

Application No.: 09/736,021  
Amendment Dated: December 8, 2003  
Reply to Office Action of: October 27, 2003

"The examiner will consider the documents cited in the international search report in a PCT national stage application when the Form PCT/DO/EO/903 indicates that both the international search report and the copies of the documents are present in the national stage file. In such a case, the examiner should consider the documents from the international search report and indicate by a statement in the first Office action that the information has been considered."

MPEP §609

The Office has acknowledged receipt of the **International Search Report** and the copies of the cited references on **Form PCT/DO/EO/903**. The respective copies of the International Research Report and the Prom PCT/DO/EO/903 are attached herewith. Accordingly, Applicants respectfully request the Office to acknowledge consideration of the above references. For the Examiner's convenience, Applicants have listed the references on a Form 1449.

Applicants submit that the present application is now in condition for allowance and early notice of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



Norman F. Oblon  
Attorney of Record  
Registration No.: 24,618

Customer Number  
**22850**

Tel: (703) 413-3000  
Fax: (703) 413-2220  
NFO:KAG:

Kirsten A. Grueneberg, Ph.D.  
Registration No.: 47,297

Claims on appeal in

09/147, 813

APPENDIX

(US 2001/0041251)

CLAIMS ON APPEAL

40. A glass-free motor vehicle window, which is at least partly transparent, and which meets French standard R43 for motor vehicle windows, which comprises:

a.) a plastic layer having a thickness of 5 to 10 mm,  
b.) at least one skin layer of a plastic film having a thickness of 10 to 100  $\mu\text{m}$  coated on said plastic layer, and

c.) a scratch-resistant layer having a thickness of 1 to 10  $\mu\text{m}$  supported by said plastic film,

wherein said window is prepared by the following process (A) or process (B), wherein process (A) comprises:

1.) providing said skin layer b.), either flat or in shaped form,  
2.) subjecting said skin layer to heat treatment, the skin layer, being supported completely or partly by a mould surface, an auxiliary means for shaping at least part of the skin to the said mould surface being optionally provided so as to relax stresses in the skin, and crosslinking constituent elements thereof; and

3.) joining the skin to said plastic layer a.) by hot pressing in a form, or by thermoplastic injection moulding or reactive injection moulding of the material of the plastic layer a.), the skin having been positioned in the bottom of the mould in such a way that a scratch-resistant layer c.) is in direct contact with the mould;

and process (B) comprises:

Ramsey Zachmann  
Floor 6 B 87

1.) depositing the constituent elements of a scratch-resistant layer on a substantially flat plastic film; and

2.) shaping said film bearing the elements of the scratch-resistant layer into a shape which is the same as or at least similar to the ultimate shape of the end-product, while at the same time at least partly crosslinking the scratch-resistant layer.

41. The glass-free motor vehicle window according to Claim 40, wherein said plastic layer a.) comprises a thermoplastic, comprising polycarbonate, poly(methylmethacrylate), an ethylene/vinyl acetate copolymer, poly(ethylene terephthalate), polyurethane or a cycloolefin copolymer, or an ionomer resin or a thermosetting or thermally crosslinkable material of a polyurethane, unsaturated polyester or ethylene/vinyl acetate copolymer, or a combination of several thicknesses of the same or several of these plastics.

42. The glass-free motor vehicle window according to Claim 40, wherein said skin layer b.) comprises of one or more transparent thermoformable plastic films made of polycarbonate, polypropylene, poly(methyl methacrylate), an ethylene/vinyl acetate copolymer, poly(ethylene terephthalate), polyurethane, polyvinyl butyral or a cycloolefin copolymer.

43. The glass-free motor vehicle window according to Claim 42, wherein interposed between plastic films (b.) or deposited on said plastic film b), is at least one functional layer.

44. The glass-free motor vehicle window according to Claim 40, wherein said scratch-resistant layer c.) is inorganic, or consists essentially of networks of entangled inorganic and organic molecular chains linked to each other by silicon-carbon bonds.

45. The glass-free motor vehicle window according to Claim 44, wherein said inorganic scratch-resistant layer c.) consists essentially of polysiloxanes, silica or alumina.

46. The glass-free motor vehicle window according to Claim 40, wherein an external layer of said glass-free motor vehicle window comprises a hydrophobic/oleophobic agent which is incorporated into said scratch-resistant layer c.), grafted onto said scratch-resistant layer c.), or self-supported on a film of poly(vinylfluoride) or poly(vinylidene fluoride) applied directly to said scratch-resistant layer c.).

47. The glass-free motor vehicle window according to Claim 46, wherein said hydrophilic/oleophilic agent is obtained from precursor silanes having a hydrolyzable alkoxy- or halo-functional group at one end and a perfluorinated carbon chain at the other end.

48. The glass-free automobile window according to Claim 40, wherein said skin layer b) includes at least one decorative or masking layer or both covering all or part of the surface of the window.

49. The glass-free automobile window according to Claim 40, including at least one adhesion layer between said layer a.) and layer b.).

50. The glass-free automobile window according to Claim 40, wherein the skin layer b.) includes one or more optically selective layers, having thicknesses of between 2 and 35  $\mu\text{m}$  and separated from each other, as well as from other adjacent layers or films, by dielectric layers.

51. The glass-free automobile window according to Claim 50, wherein said optically selective layers are metal layers.

52. The glass-free automobile window according to Claim 40, wherein said scratch resistant layer c.) has a surface appearance without any crazing.

53. A process for preparing a glass-free automobile window which is at least partly transparent, and which meets French standard R43 for motor vehicle windows, which comprises:

a.) a plastic layer having a thickness of 5 to 10 mm,

b.) at least one skin layer of a plastic film having a thickness of 10 to 100  $\mu\text{m}$  coated on said plastic layer, and

c.) a scratch-resistant layer having a thickness of 1 to 10  $\mu\text{m}$  supported by said plastic film, which process comprises:

1.) providing said skin layer b.), either flat or in shaped form,

2.) subjecting said skin layer to heat treatment, the skin layer, being supported completely or partly by a mould surface, an auxiliary means for shaping at least part of the skin to the said mould surface being optionally provided so as to relax stresses in the skin, and crosslinking constituent elements thereof; and

3.) joining the skin to said plastic layer a.) by hot pressing in a form, or by thermoplastic injection moulding or reactive injection moulding of the material of the plastic layer a.), the skin having been positioned in the bottom of the mould in such a way that a scratch-resistant layer c.) is in direct contact with the mould.

54. The process of Claim 53, wherein said constituent elements are supplied by screen printing, flexography, ink jet printing, laser printing, dip coating or spraying.

55. The process of Claim 53, wherein in step 2), said heat treatment is effected at 100° to 300°C.

56. A process for preparing a glass-free automobile window which is at least partly transparent, and which meets French standard R43 for motor vehicle windows, which comprises:

a.) a plastic layer having a thickness of 5 to 10 mm,

b.) at least one skin layer of a plastic film having a thickness of 10 to 100  $\mu\text{m}$  coated on said plastic layer, and

c.) a scratch-resistant layer having a thickness of 1 to 10  $\mu\text{m}$  supported by said plastic film, which process comprises:

1.) depositing the constituent elements of a scratch-resistant layer on a substantially flat plastic film; and

2.) shaping said film bearing the elements of the scratch-resistant layer into a shape which is the same as or at least similar to the ultimate shape of the end-product, while at the same time at least partly crosslinking the scratch-resistant layer.

57. The process of Claim 56, wherein the crosslinking and simultaneous shaping involve a heat treatment at a temperature of from 100 and 300°C.

58. The process of Claim 57, wherein the temperature is from 140 to 240°C.

59. The process of Claim 56, wherein the shaping is carried out by supporting the film coated with the scratch-resistant layer, or the elements intended to constitute this layer, at least on part of its surface, by a mould.

60. The process of Claim 56, wherein the mould carrying the film is a frame open at its center.

61. The process of Claim 56, wherein the film coated with the scratch-resistant layer of elements constituting this layer is combined, before shaping, with one or more other films which themselves fulfill functions or carry means for carrying out these functions other than the scratch-resistance function.

62. A method of incorporating a body element, at least a portion of which is transparent, in a manufactured object, which comprises incorporating the glass-free automobile window according to Claim 40, into an automobile.

63. A glass-free motor vehicle window, which is at least partly transparent, and which meets French standard R43 for motor vehicle windows, which comprises:

- a.) a plastic layer having a thickness of 5 to 10 mm,
- b.) at least one skin layer of a plastic film having a thickness of 10 to 100  $\mu\text{m}$  coated on said plastic layer, and
- c.) a scratch-resistant layer having a thickness of 1 to 10  $\mu\text{m}$  supported by said plastic film,

wherein said scratch-resistant layer c.) is essentially inorganic or consists essentially of networks of entangled inorganic and organic molecular chains linked to each other by silicon-carbon bonds.

64. The glass-free motor vehicle window according to Claim 63, wherein said scratch-resistant layer c.) consists essentially of networks of entangled inorganic and organic molecular chains linked to each other by silicon-carbon bonds.

65. The glass-free motor vehicle window according to Claim 64, wherein said networks of entangled inorganic and organic molecular chains linked to each other by silicon-carbon bonds are provided by an Ormocer varnish.